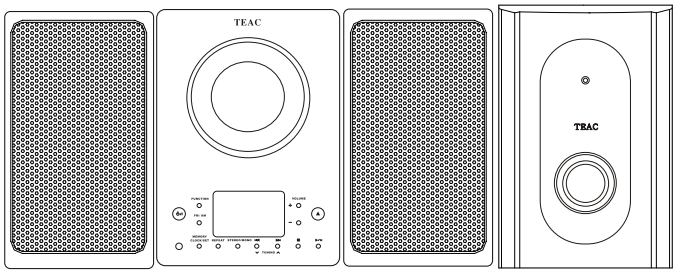

TEAC

SERVICE MANUAL

MC-DX25

MICRO Hi-Fi SYSTEM

COMPACT disc DIGITAL AUDIO

NOTES

- PC board shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. they must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
- Parts of [ ] mark can be used only with the version designated.

CONTENTS

1 SPECIFICATIONS 2
2 ADJUSTMENT AND CHECKS 3
3 EXPLODED VIEW AND PARTS LIST 5
4 PC BOARDS AND PARTS LISTS 8
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6 INCLUDED ACCESSORIES 18

MC-DX25

1 SPECIFICATIONS

Amplifier Section

Output Power (L+R)	5W + 5W
Output Power Subwoofer:	15 W
Input Sensitivity	300mV
Frequency Response :	50 to 20,000 Hz

Tuner Section (FM)

Frequency Range	87.5 MHz to 108.0 MHz
Sensitivity (S/N30dB)	20dBuV

Tuner Section (AM)

Frequency Range	522 to 1620 kHz
Sensitivity (S/N20dB)	54dBuV/m

CD Player Section

Frequency Responce	20 to 20,000 Hz (+/-1dB)
Signa-to-Noise Ratio	55 dB
Wow and Flutter	Unmeasurable

SPEAKER SYSTEM Section

L & R speaker :	
Type :	Full range flat type
Impedance :	4 ohms
Subwoofer:	
Impedance :	8 ohms

GENERAL

Power Requirements:	AC230V, 50 Hz	
Power Consumption:	80 W (standby: less than 1.4W)	
Dimension (W x H x D):	Main Unit	160 x 226 x 86 mm
	L & R Speaker	140 x 226 x 61mm
	Subwoofer	160 x 234 x 330mm
Weight: (net)	Main Unit	1.15 kg
	L & R Speaker	0.6 kg(each)
	Subwoofer	5.4 kg

Standard Accessories:
Remote Control Unit x 1
Subwoofer Cable x 1
Speaker Cable x 2
FM Antenna x 1
AM Antenna x 1
Battery for Remote Control x 1
Wall Mount Adaptor x 3
Wall Mount screw x 10
Tape Plastic Wall Anchor x 10
Template for Wall Mounting x 1
Owner s Manual x 1
Warranty Card x 1

- Design and specifications are subject to change without notice.
- Illustrations may differ slightly from production models.
- Weight and dimensions are approximate.

2 ADJUSTMENTS AND CHECKS

2-1 TUNER SECTION

- Use a screwdriver with a plastic or ceramic grip for all adjustment.

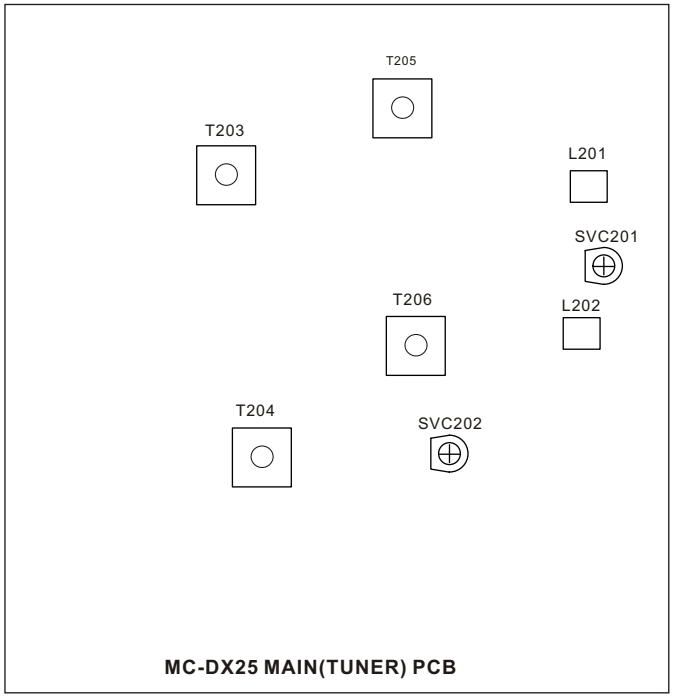
2-1-1 FM adjustment

1. Set the function switch to the FM position.
2. Connect the signal generator output through a 75 ohm dummy antenna to "ANT" on MAIN PCB.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.

2-1-2 AM adjustment

1. Set the function switch to the AM position.
2. Connect the test loop antenna across the output of the signal generator.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.

2-2 Adjustment and Test Points



MC-DX25 MAIN(TUNER) PCB

2-2-1 FM/AM alignment chart

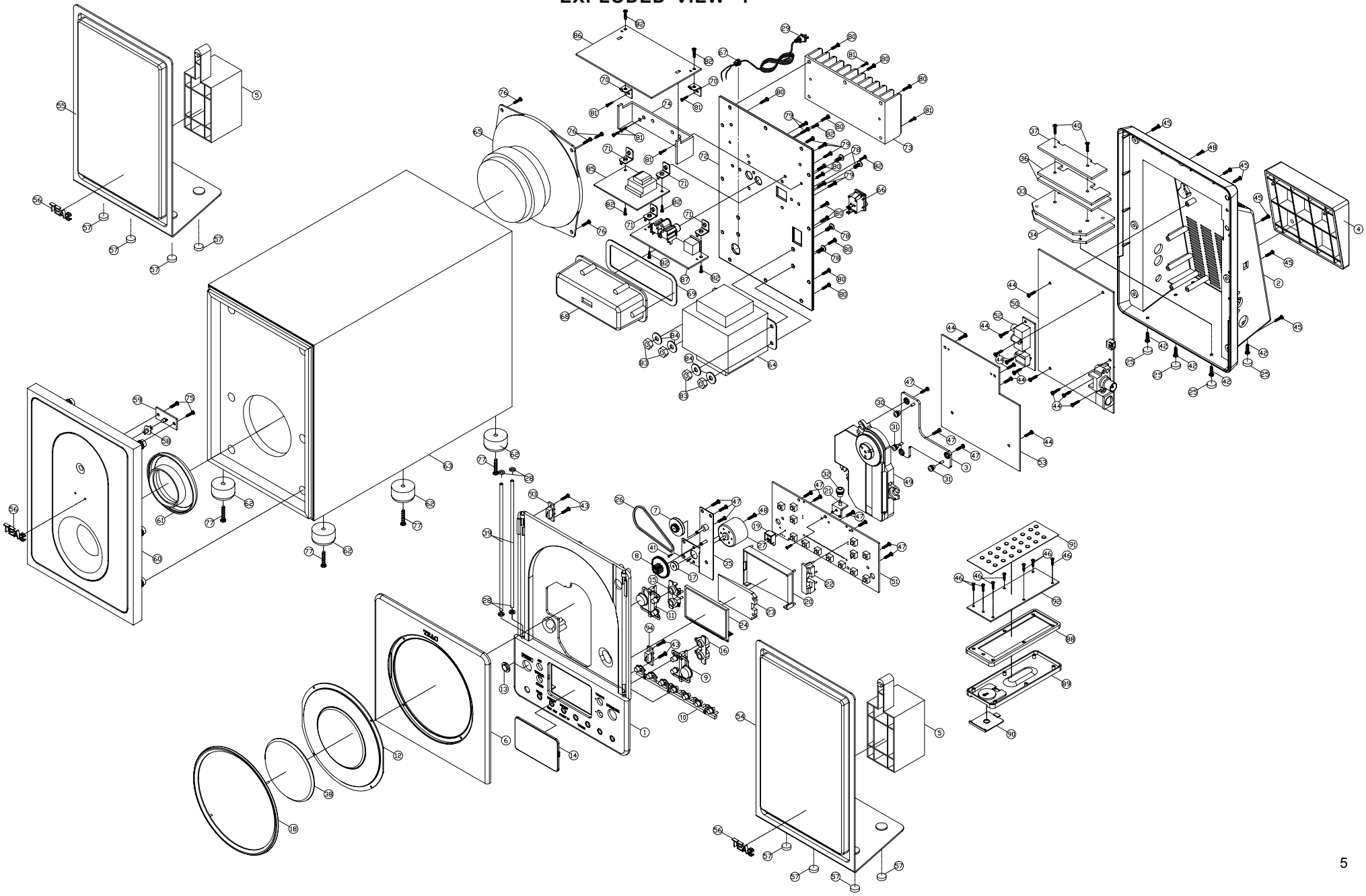
ITEM	SG SETTING	TUNER SETTING	ADJUSTMENT POINT	ADJUSTMENT
FM				
1.IFT adjustment	10.7 MHz 1kHz, +/-22.5kHz dev.	108MHz	T205	With 10.7 MHz at zero crossover
2. FM band	87.5MHz 1kHz, +/-22.5kHz dev.	87.5MHz	L202	Adjust for max. output and best waveform.
3. Tracking	90MHz 1kHz, +/-22.5kHz dev.	90MHz	L201	
	106MHz 1kHz, +/-22.5kHz dev.	106MHz	SVC201	
	Repeat step 3			
AM				
1. IF adjustment	455kHz 1kHz, 30% mod	1620kHz	T203	Center for max. output.
2. AM band	522kHz 1kHz, 30% mod	522kHz	T206	Adjust for max. output and best waveform.
3. Tracking	600kHz 1kHz, 30% mod	600kHz	AM ant coil (T204)	
	1400kHz 1kHz, 30% mod	1400kHz	SVC202	
	Repeat step 3			

2-3 CD SECTION

Auto alignment.

3. EXPLODED VIEWS AND PARTS LIST

EXPLODED VIEW - 1



MC-DX25

EXPLODED VIEW-1

REF. NO		PARTS NO.	DESCRIPTION	REMARKS
1-1		56-04DX0150A030	FRONT CABINET	
1-2		56-05DX0150A020	REAR CABINET	
1-3		56-07DX01539000	CD BRACKET	
1-4		56-07DX0154A000	FULL WALL PLATE-UNIT	
1-5		56-07DX0155A000	FULL WALL PLATE-SPEAKER	
1-6		56-14DX0150A050	CD DOOR	
1-7		56-24DX01500000	CD DOOR GEAR	
1-8		56-24DX01510000	STRAP GEAR	
1-9		56-53DX0150A010	CD DOOR OPEN KNOB	
1-10		56-53DX0151A000	CD KNOB	
1-11		56-54DX0151A010	POWER KNOB-UNIT	
1-12		56-57DX01510000	CD DOOR LENS	
1-13		56-57DX01532000	REMOTE LENS	
1-14		56-57DX01540010	DISPLAY LENS	
1-15		56-57DX01559000	KNOB RING-L	
1-16		56-57DX01569000	KNOB RING-R	
1-17		56-760000000020	DOOR MOTOR PULLY	
1-18		56-57DX0151A000	CD DOOR CHROME RING	
1-19		56-07DX01569000	REMOTE BRACKET	
1-20		56-07DX01579000	DISPLAY BRACKET	
1-21		56-07DX01589000	RUBBER HOLDER	
1-22		56-22DX0151B000	LIGHT COVER	
1-23		56-57DX01520000	BACK LIGHT LENS-UNIT	
1-24		57-262392590020	FILTER SHEET	
1-25		58-262982300020	RUBBER FOOT-UNIT	
1-26		58-43DX01500020	DRIVE BELT DIA31X1MM	
1-27		58-44DX01500420	MOTOR 3V	
1-28		58-58DX01500420	RUBBER RING DIA5.4X3X1MM	
1-29	⚠	45-114200510008	AC CORD BS PLUG VDE APP CORD	
1-30		58-61EX0M108120	SHOCK ABSORBER (GREY)	
1-31		58-61MC23500020	SHOCK ABSORBER (GREY)	
1-32		58-61MC23500120	SHOCK ABSORBER (BLACK)	
1-33		61-11DX01500021	FERRUM PLATE (SCREW HOLE)	
1-34		61-11DX01500121	FERRUM PLATE (HOLE)	
1-35		61-11DX01500321	MOTOR BRACKET	
1-36		61-11DX01500420	FERRUM PLATE - C	
1-37		61-11DX01500520	FERRUM PLATE - D	
1-38		61-68DX01500020	CD ALUM COVER	
1-39		61-80DX01500020	FERRUM SHAFT 155X3MM	
1-40		66-120226210321	MACHINE SCREW MS/BH 2.6X10MM	
1-41		66-120320130321	MACHINE SCREW MS/PH 2X3MM	
1-42		66-120526160311	MACHINE SCREW MS/KH 2.6X6MM	
1-43		66-140220160321	SELF-TAPPING SCREW TA/BH 2X6MM	
1-44		66-140226180321	SELF-TAPPING SCREW TA/BH 2.6X8MM	
1-45		66-140226210321	SELF-TAPPING SCREW TA/BH 2.6X10MM	
1-46		66-140520170121	SELF-TAPPING SCREW TA/KH 2X7MM	
1-47		66-140326180321	SELF-TAPPING SCREW TA/BH 2.6X8MM	
1-48		66-140526210321	SELF-TAPPING SCREW TA/KH2.6X10MM	
1-49		20-70CMSM93B000	CD MECHANISM	
1-50		05-01DX01500100	MAIN(TUNER) PCB ASSY	

EXPLODED VIEW-1

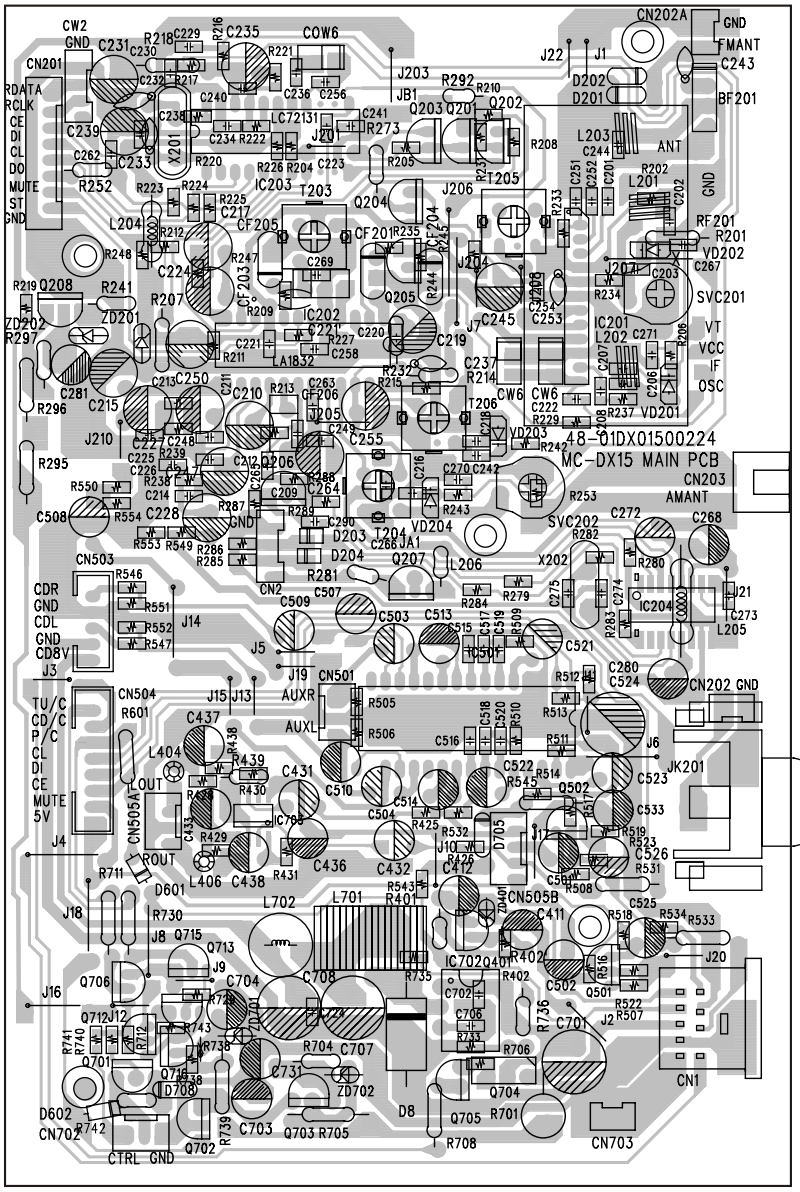
REF. NO		PARTS NO.	DESCRIPTION	REMARKS
1-51		05-05DX01500020	KEY/DISPLAY PCB ASSY	
1-52		05-09DX01500010	HP/AUX PCB ASSY	
1-53		05-30DX01510100	CD(MP3) PCB ASSY	
1-54		19-50DX25M00000	SPEAKER BOX UNIT-R	
1-55		19-50DX25M00001	SPEAKER BOX UNIT-L	
1-56		56-58EX0M118000	LOGO BADGE - TEAC	
1-57		58-262702250020	RUBBER FOOT SPK DIA7X2.5MM	
1-58		56-57DX02509000	LIGHT LENS - SUBWOOFER BOX	
1-59		48-16DX01500221	LED PCB ASSY	
1-60		56-85DX0250A000	SUBWOOFER PANEL	
1-61		56-87DX02508000	PLASTIC TUBE	
1-62		58-263253150020	RUBBER FOOT DIA 25MM	
1-63		58-73DX02500020	SUBWOOFER BOX	
1-64	⚠	18-205DX0150120	H/TRANSFORMER EI66 230V/50HZ	
1-65		19-021153300120	SPEAKER 8 OHM / 5W	
1-66		41-172111000310	SWITCH	
1-67		43-500000002020	AC CORD BUSHING	
1-68		56-22DX01508000	PCB COVER	
1-69		58-58DX01500320	CUSHION 106X40X1MM	
1-70		61-11V600000020	PCB BRACKET	
1-71		61-11V820010020	PCB FIX BRACKET - B	
1-72		61-33DX02500020	SUB. REAR PANEL	
1-73		61-48DX01500020	HEATSINK - A	
1-74		61-48DX01500120	HEATSINK - B	
1-75		66-140230210321	SELF-TAPPING SCREW TA/BH 3X10MM	
1-76		66-141136216121	SELF-TAPPING SCREW TA/RH 3.6X16MM(BLK)	
1-77		66-141430212121	SELF-TAPPING SCREW TA/BWH 3X12MM(BLK)	
1-78		66-120240212121	MACHINE SCREW MS/BH4X12MM (BLK)	
1-79		66-140230212121	SELF-TAPPING SCREW TA/BH 3X12MM (BLK)	
1-80		66-140230214121	SELF-TAPPING SCREW TA/BH 3X14MM (BLK)	
1-81		66-150230180123	HARDEN SCREW TTB 3X8MM AB (BLK)	
1-82		66-120230160121	MACHINE SCREW MS/BH 3X6MM (BLK)	
1-83		67-021400000020	NUT M4MM	
1-84		68-112403101000	METAL WASHER 4X10X1MM	
1-85		05-03DX01500000	STANDBY PCB ASSY	
1-86		05-07DX01500010	SUBWOOFER POWER PCB ASSY	
1-87		05-08DX01500010	RCA/D-S JACK PCB ASSY	
1-88		56-43DX0150A000	REMOTE FRONT CABINET	
1-89		56-43DX01518000	REMOTE REAR CABINET	
1-90		56-44DX01508000	REMOTE BATTERY DOOR	
1-91		57-33DX01500220	REMOTE PLATE (TEAC-RC970)	
1-92		05-13DX01500000	REMOTE PCB ASSY	
1-93		48-23DX0150022A	CLOSE SW PCB ASSY	
1-94		48-23DX01500220	OPEN SW PCB ASSY	

4 PC BOARDS AND PARTS LIST

MAIN (TUNER)PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-01DX01500100	MAIN(TUNER) PCB ASSY	
	48-01DX01500224	MAIN(TUNER) PCB	
BT201	31-058880000110	BAND PASS FILTER #GFMB3-SE	
CF201,204	31-028107000120	FILTER LT10.7MA5	
CF203	31-026450010110	FILTER SFU450B	
CF205	31-038107020120	FILTER JT10.7MG46-A	
CF206	31-046456000220	RESONATOR ZTB456F15	
CN1	43-462103003320	D-S TERMINAL #DSW-31	
CN201,504	43-012200180120	WAFER 2MM 8 PIN	
CN203	43-022250120120	WAFER 2.5MM 2PIN	
CN501,505A,702	43-012200130120	WAFER 2MM 3 PIN	
CN503	43-012200150120	WAFER 2MM 5 PIN	
CN505B	43-012200140120	WAFER 2MM 4 PIN	
CN703	43-012250120120	WAFER 2.5MM 2PIN	
D8	12-1N5822000021	RECTIFIER DIODE 1N5822	
D201-204,705	12-1N4148000021	DIODE 1N4148	
D601,602,708	12-1N4001000021	DIODE 1N4001	
IC202	16-LA1832000021	IC - LA1832	
IC203	16-LC7213100021	IC - LC72131	
IC204	16-BU1924F00021	IC - BU1924F	
IC501	16-LC7534200021	IC - LC75342	
IC702	16-MC34063A0021	IC - MC34063A	
IC703	16-SC1308000021	IC - SC1308-01	
JK201	43-421000003210	COAXIAL JACK IF-01A	
L204	38-014100050020	AXIAL INDUCTOR 100UH	
L205,404,406	38-013100050220	AXIAL INDUCTOR 10UH #EC-36	
L206, R241	38-013100050120	AXIAL INDUCTOR 10UH #EC24	
L701	38-104230050020	CHOKE COIL 230UH	
L702	38-103200050020	CHOKE COIL 20UH	
Q201-203,501,502, Q705,706,715	11-9014C0000021	TR - 9014C	
Q204,207,701	11-9015C0000021	TR - 9015C	
Q205	11-9018F0000021	TR - 9018F	
Q401,208,716	11-8050C0000021	TR - 8050C	
Q703	11-KSD882Y00021	TR - KSD882Y	
Q704	11-KSB772YS0021	TR - KSB772SY	
Q712,713	11-8550C0000021	TR - 8550C	
RF201	37-09A150000020	TUNER #FE450-G11	
SVC202	27-501802201020	TRIMMER 20PF	
T203	40-02A049004020	IFT 7MM A049 - YELLOW	
T204	40-023120000020	IFT 7MM 312A - BLACK	
T206	40-02660R002020	IFT 7MM 660R - RED	
VD203,204	12-SVC321SPA021	VARICAP DIODE SVC321SPA	
X201	31-017450002030	CRYSTAL 4.5 MHZ	
X202	31-017433202020	CRYSTAL 4.332MHZ	
ZD202	12-011620320121	ZENER DIODE 6.2V	
ZD401	12-011470320121	ZENER DIODE 4.7V	
ZD701	12-012110320121	ZENER DIODE 11V	
ZD702	12-011910320121	ZENER DIODE 9.1V	

MAIN(TUNER) PCB



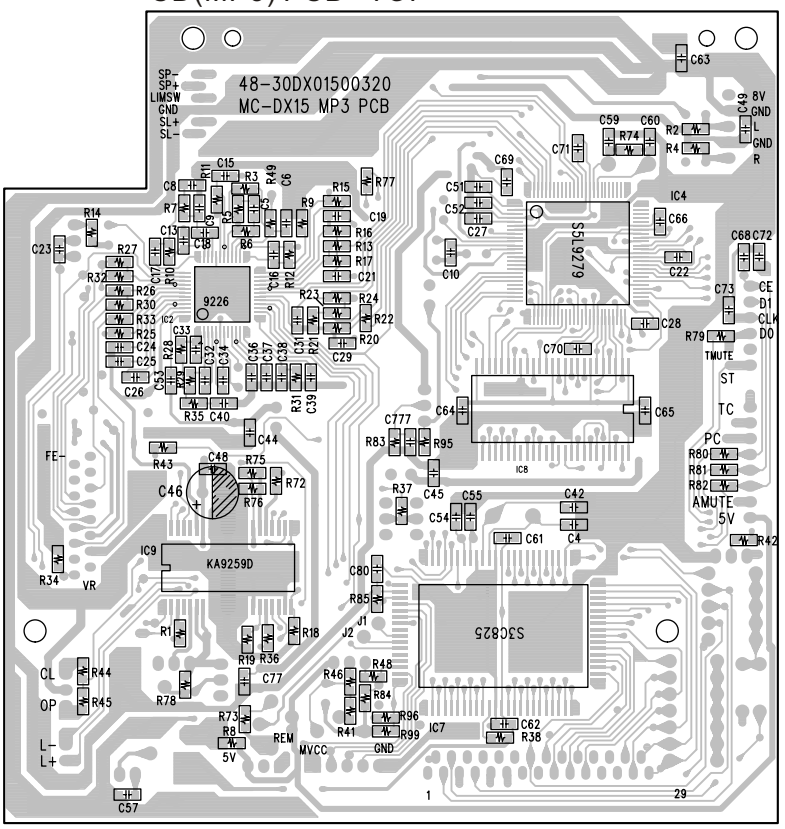
CD(MP3) PCB ASSY - TOP

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-30DX01510100	CD(MP3) PCB ASSY	
	48-30DX01500322	CD(MP3) PCB	
IC2	16-S1L9226X0021	IC - S1L9226X01	
IC4	16-S5L927900021	IC - S5L9279X01	
IC7	16-S3P825A00421	IC - S3P825A	
IC8	16-M12L16160021	IC - M12L16161A	
IC9	16-KA9259D00021	IC - KA9259D	

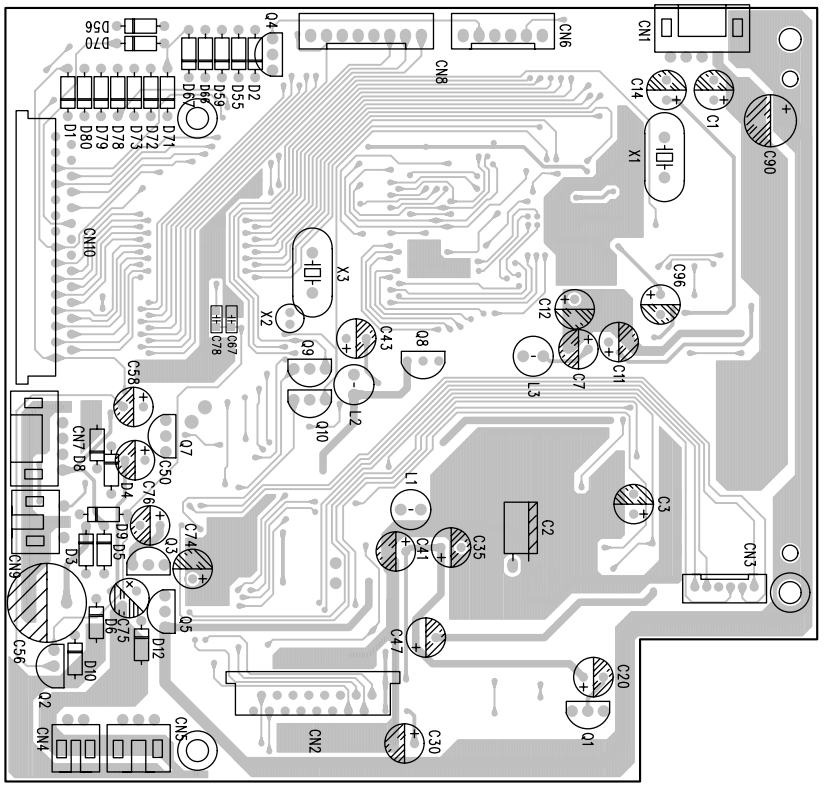
CD(MP3) PCB ASSY - BOTTOM

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
C56 ⚠	26-017220650121	E.CAP 2200UF/10V	
CN2	43-022100216020	F.F.C WAFER 1MM 16 PIN	
CN3	43-012150160320	WAFER 1.5MM 6 PIN	
CN4	43-022200120120	WAFER 2MM 2 PIN	
CN5,9	43-022200130120	WAFER 2MM 3 PIN	
D1-5,9-11,55,56, D62,66,67,71,71, D73,78	12-1N4148000021	DIODE 1N4148	
D6,8,12	12-011390320121	ZENER DIODE 3.9V	
D7 ⚠	12-1N5819000021	RECTIFIER DIODE 1N5819	
L1,2,3	38-013100050020	AXIAL INDUCTOR 10UH	
Q1,7,9,10	11-9015C0000021	TR - 9015C	
Q2,3,4,8	11-9014C0000021	TR - 9014C	
Q5	11-8550C0000021	TR - 8550C	
X1	31-018169302220	CRYSTAL 16.9344MHZ.	
X2	31-015320003310	CRYSTAL 32.768KHZ	
X3	31-017800002120	CRYSTAL 8.000MHZ	

CD(MP3) PCB - TOP



CD(MP3) PCB - BOTTOM



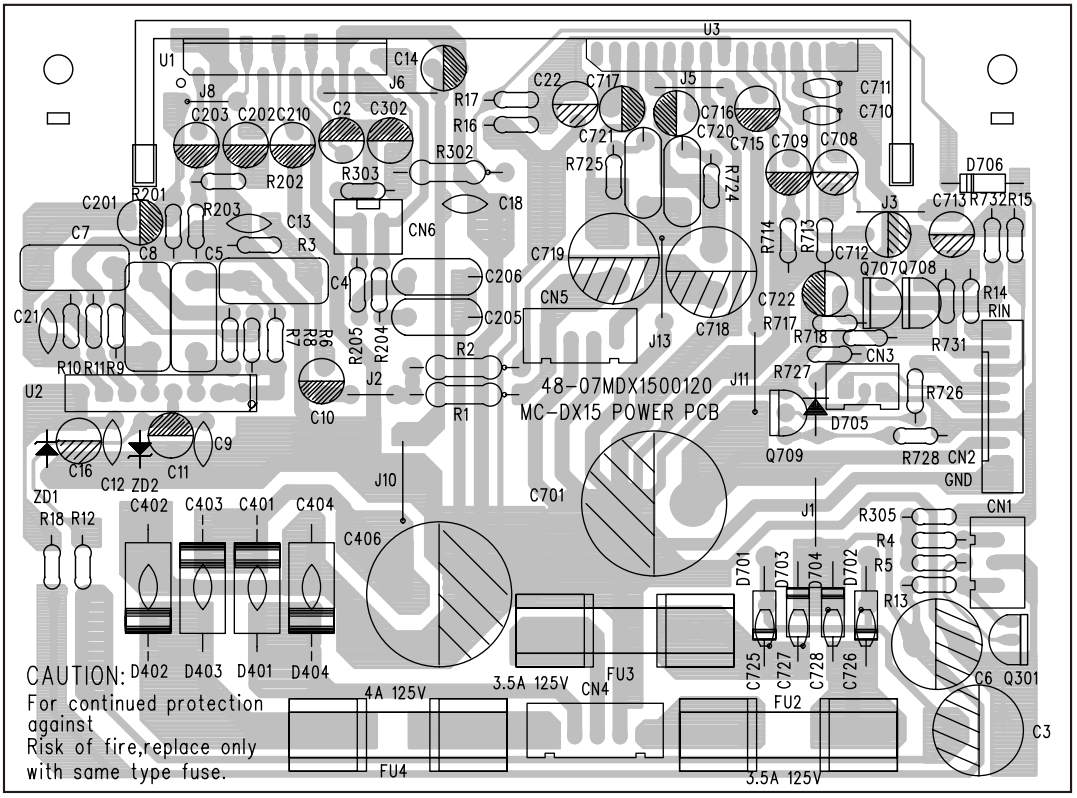
SUBWOOFER POWER PCB ASSY

REF. NO		PARTS NO.	DESCRIPTION	REMARKS
		05-07DX01500010	SUBWOOFER POWER PCB ASSY	
		48-07DX01500123	SUBWOOFER POWER PCB	
CN1		43-012250130120	WAFER 2.5MM 3 PIN	
CN2		43-012200190120	WAFER 2MM 9 PIN	
CN3		43-012200130120	WAFER 2MM 3PIN	
CN4		43-012250150120	WAFER 2.5MM 5 PIN	
CN5		43-012250140120	WAFER 2.5MM 4 PIN	
CN6		43-012250120120	WAFER 2.5MM 2 PIN	
C406	⚠	26-017470950111	E.CAP - 4700UF/35V	
C701	⚠	26-017470850121	E.CAP - 4700UF/25V	
C718,719	⚠	26-017100750121	E.CAP - 1000UF/16V	
D301,706		12-1N4001000021	RECTIFIER DIODE 1N4001	
D401-404	⚠	12-1N5401000021	RECTIFIER DIODE 1N5401	
D701-704	⚠	12-RL2020000021	RECTIFIER DIODE RL-202	
D705,707		12-1N4148000021	DIODE 1N4148	
FU2,3	⚠	46-055350300010	GLASS FUSE 3.5A/250V	
FU4	⚠	46-055400300010	GLASS FUSE T4A/250V	
Q301,709		11-9014C0000021	TR - 9014C	
Q707,708,710		11-2SD1936T0021	TR - 2SD1936T	
U1		16-TA8216H00021	IC - TA8216H	
U2		16-BA4558N00021	IC - BA4558N	
U3		16-BA5417000021	IC - BA5417	
ZD1,2		12-011910320121	ZENER DIODE 9.1V	

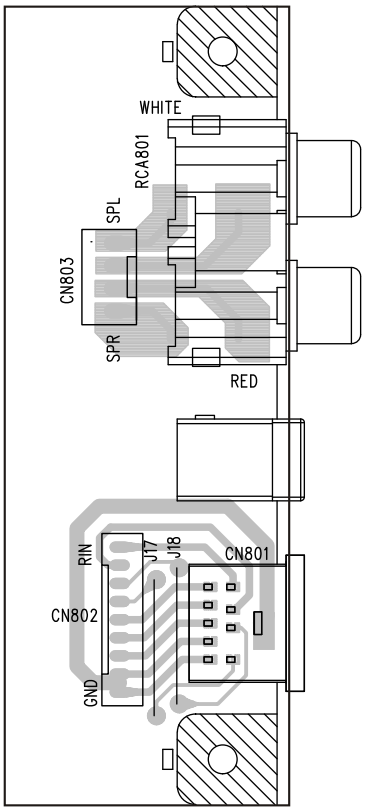
RCA/D-S JACK PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-08DX01500010	RCA/D-S JACK PCB ASSY	
	48-08DX01500220	RCA/D-S PCB	
CN801	43-462103003320	D-S TERMINAL #DSW-31	
L801-804	38-103100050320	CHOKE COIL 10UH	
RCA801	43-451200006120	RCA JACK 2PIN - TC58-345-32	

SUBWOOFER POWER PCB



RCA/D-S JACK PCB



KEY / DISPLAY PCB ASSY

REF. NO		PARTS NO.	DESCRIPTION	REMARKS
		05-05DX01500020	KEY/DISPLAY PCB ASSY	
		48-05DX01500120	KEY/DISPLAY PCB	
LCD		13-05DX01500120	LCD DISPLAY SDH-DA797-TN-1	
LED1,3		13-011300022020	LED D3MM - WHITE	
LED2,4		13-011506022120	LED D5MM - BLUE	
Q707		11-9015C0000021	TR - 9015C	
REM		17-05FM60380011	OPTIC SENSOR FM-6038TM2-5A	
SW1-13		41-150010030020	TACH SW 6x6mm 4 LEGS	

STANDBY PCB ASSY

REF. NO		PARTS NO.	DESCRIPTION	REMARKS
		05-03DX01500000	STANDBY PCB ASSY	
		48-03DX01500123	STANDBY PCB	
CN301		43-012200130120	WAFER 3PIN P=2MM	
D309-315		12-1N4001000021	DIODE - 1N4001	
FU1	⚠	46-074100300020	SUBMINIATURE FUSE 100MA/250V	
Q302		11-9014C0000021	TR - 9014C	
Q303		16-LM78L0500121	IC - LM78L05	
RL301		46-50MC23000000	RELAY ME-7-009	
T301	⚠	18-205DX0150190	TRANSFORMER EI28 - HF-V28A58	

HP/AUX JACK PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-09DX01500010	HP/AUX PCB ASSY	
	48-09DX01500120	HP/AUX PCB	
AUX	43-451200012020	RCA JACK 2PIN TC58-345-31	
HEADPHONE	43-431360004020	PHONE JACK 3.5MM-TC38-067-05	
L401,402,405	38-013100050220	AXIAL INDUCTOR 10UH	
L403	32-031351600025	FERRITE BEAD 3.5x6x0.8TB	

LED PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	48-16DX01500221	LED PCB ASSY	
	13-011309022020	LED LAMP 3MM - ORANGE/BLUE	

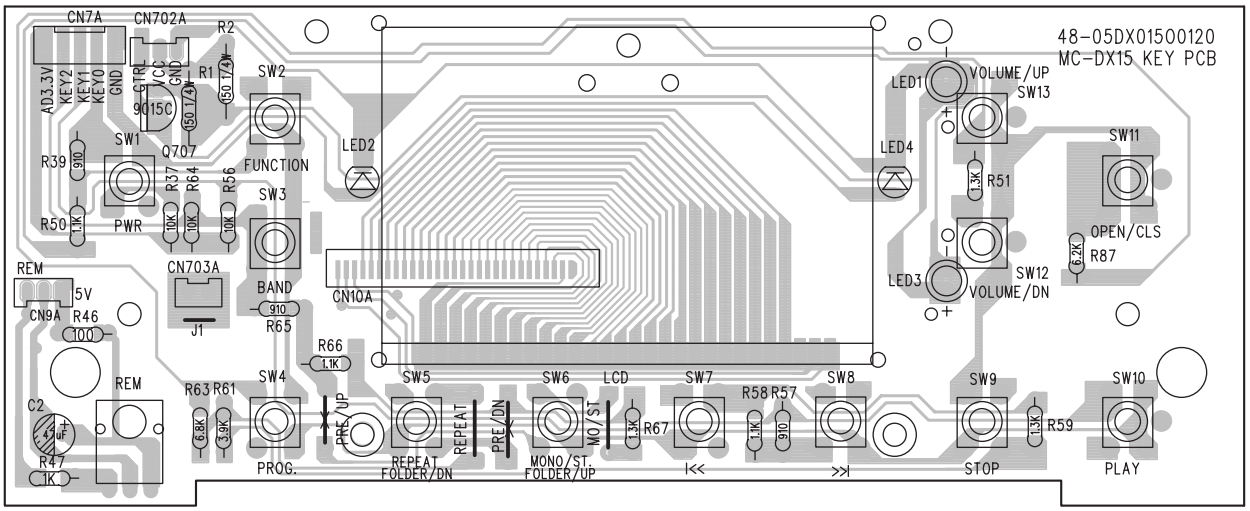
OPEN SW PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	48-23DX01500220	OPEN SW PCB ASSY	
	41-071200010020	SERIES MICRO SWITCH SD-007A	

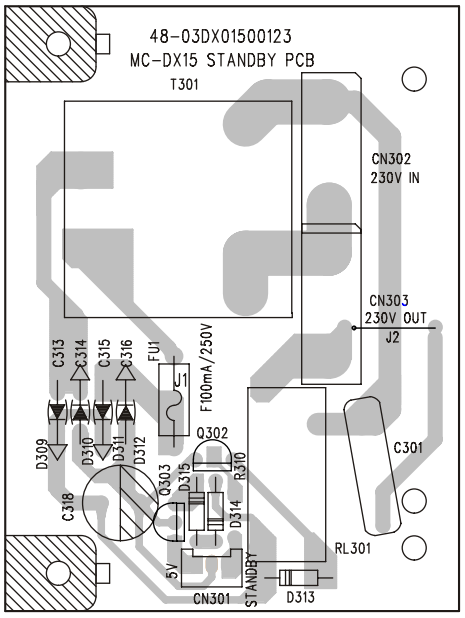
CLOSE SW PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	48-23DX0150022A	CLOSE SW PCB ASSY	
	41-071200010020	SERIES MICRO SWITCH SD-007A	

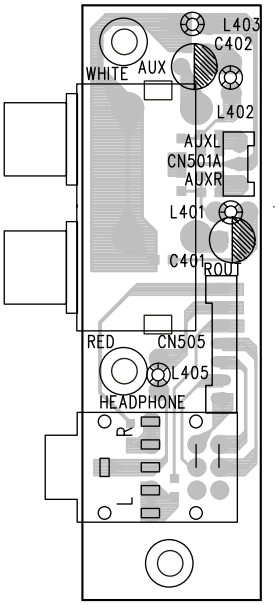
KEY/DISPLAY PCB



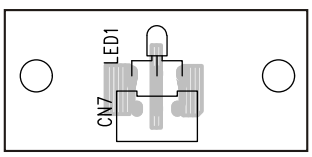
STANDBY PCB



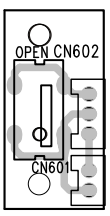
HP/AUX JACK PCB



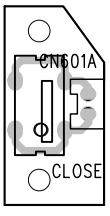
LED PCB



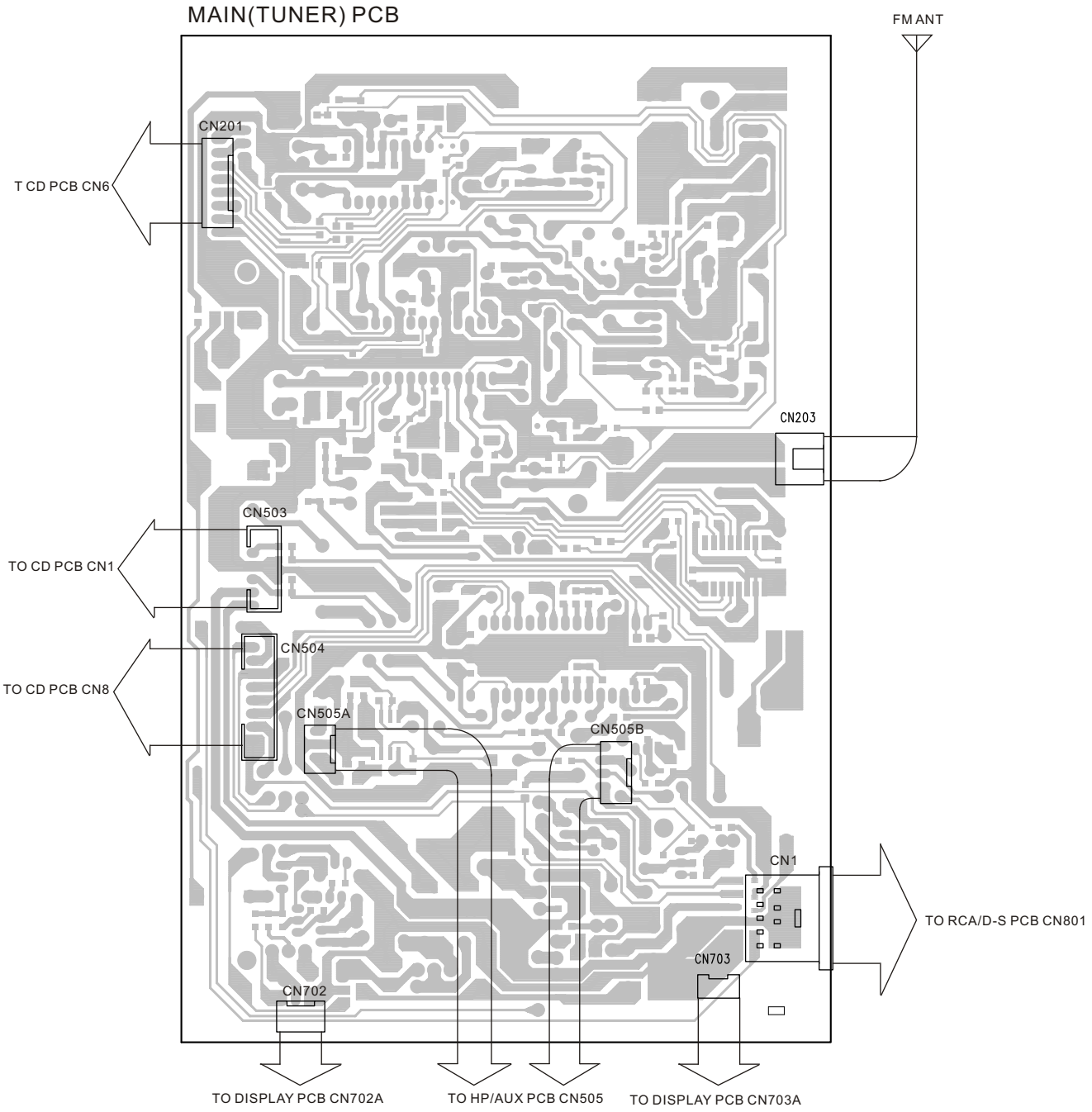
OPEN SW PCB



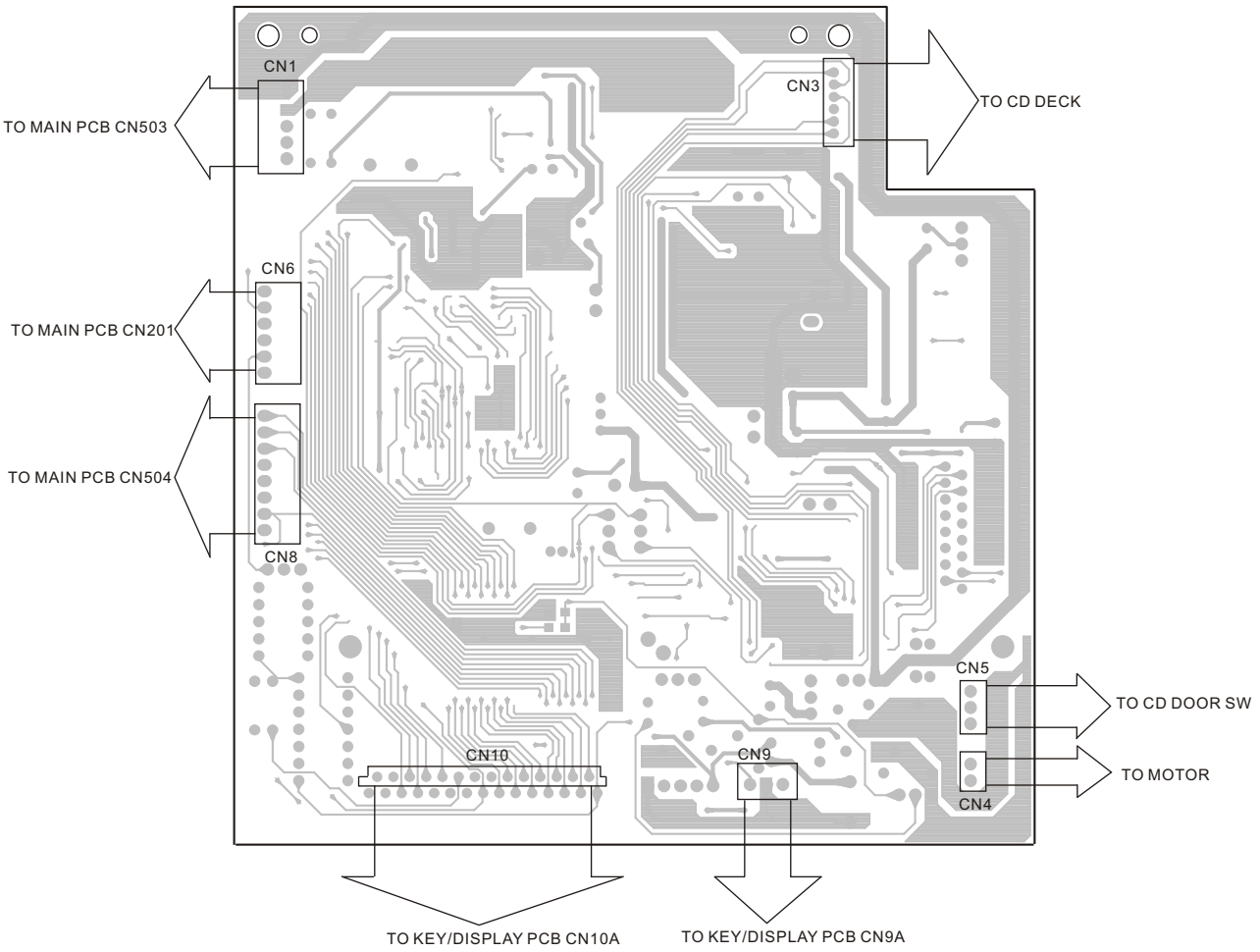
CLOSE SW PCB



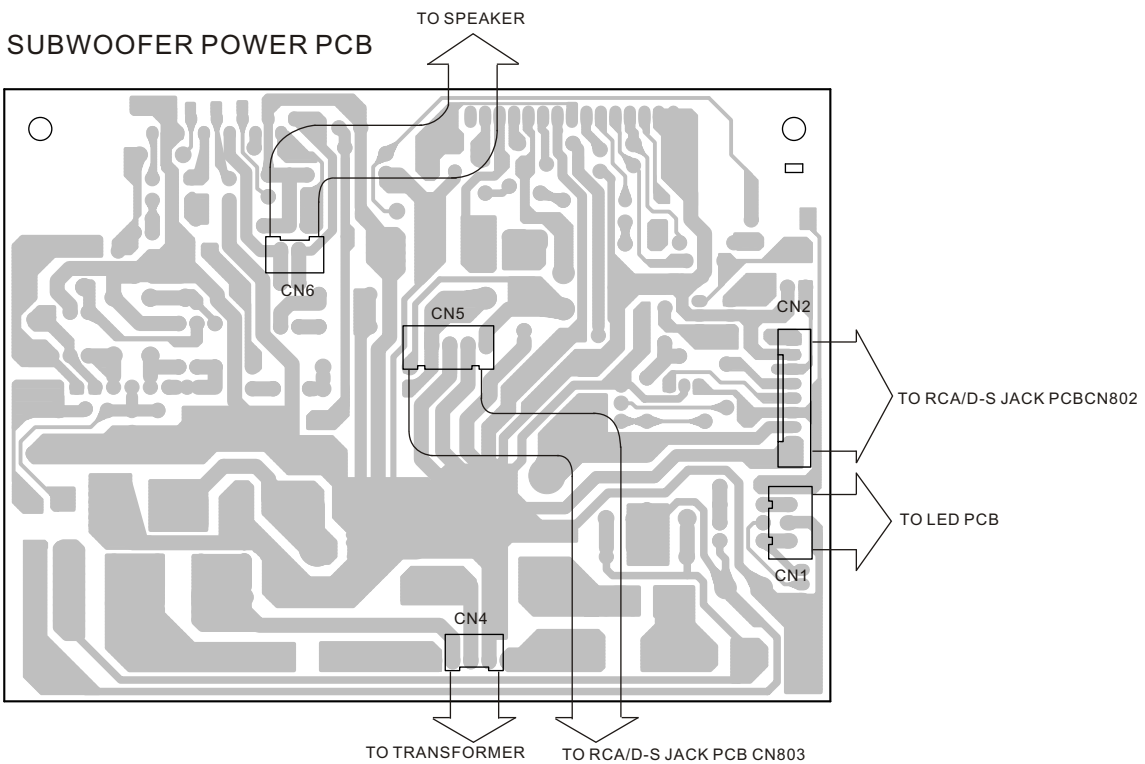
5 WIRING DIAGRAM



CD(MP3) PCB - BOTTOM



SUBWOOFER POWER PCB



6 INCLUDED ACCESSORIES

INCLUDED ACCESSORIES

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	77-20DX02500020	INSTRUCTION BOOK (E)	
	02-17DX01500010	REMOTE CONTROL - RC970	
	45-194150000020	FM ANT 1.5M - BLACK	
	02-32DX01500000	AM LOOP ANT ASSY	
	45-164250051020	SPEAKER CABLE - WHITE	
	45-164250151020	SPEAKER CABLE - RED	
	51-021301000050	LITHIUM BATTERY CR2032	
	45-244200059020	9 PIN S TERMINAL CABLE - GREY	

MC-DX25

TEAC

TEAC CORPORATION	3-7-3 Nakacho, Musashino-shi, Tokyo 180-8550, Japan Phone:(0422)52-5081
TEAC AMERICA, INC.	7733 Telegraph Road, Montebello, California 90640 Phone: (323)726-0303
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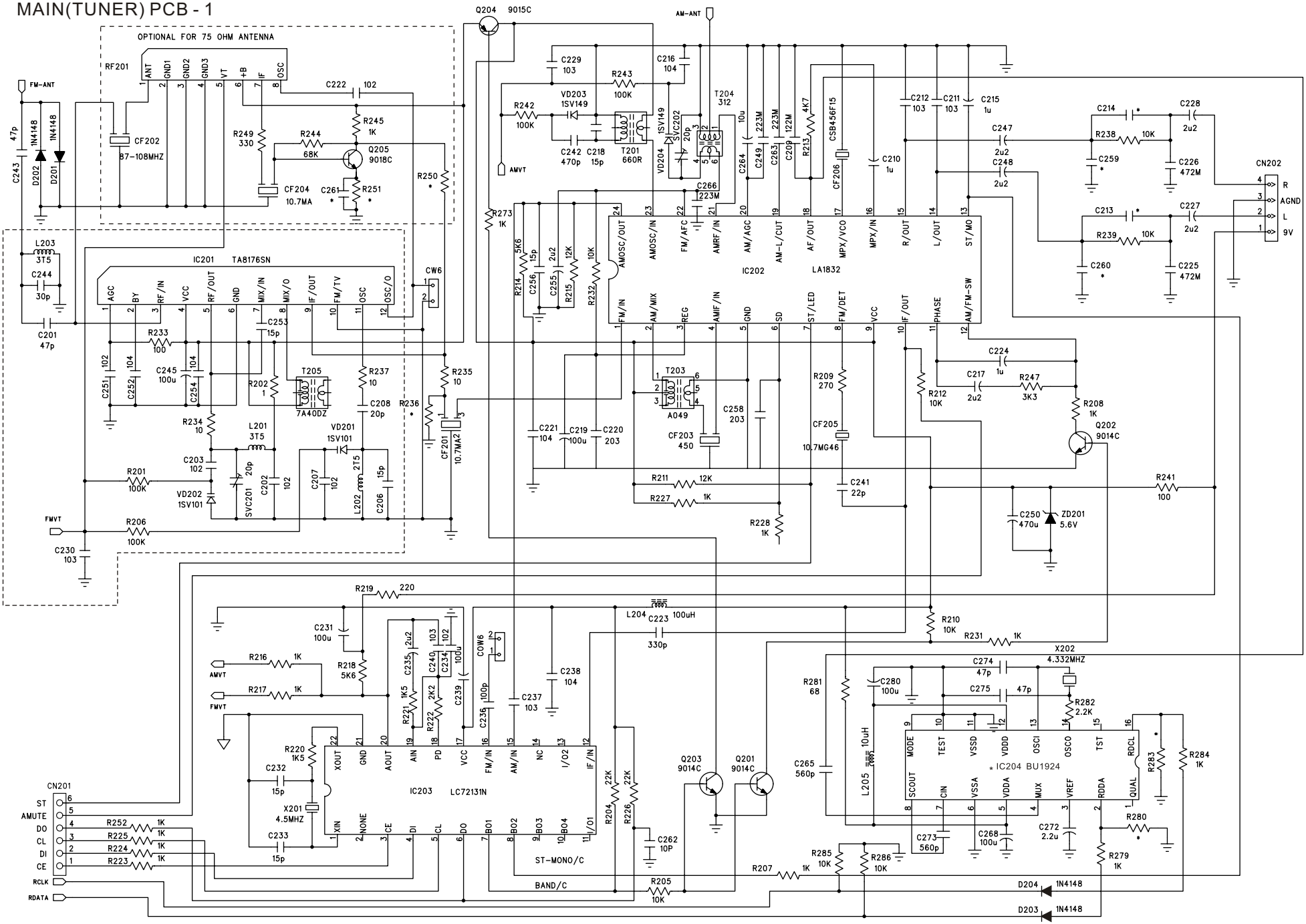
TEAC MEXICO, S.A.De C.V.	Campesinos N°184,Colonia.Granjas Esmeraida, Delegacion Iztapalapa,CP 09810,Mexico DF Phone: (525)-581-5500
TEAC UK LIMITED	Unit 19 & 20, The Courtyards, Hatters Lane, Watford, Hertfordshire, WD18 8TE5, U.K. Phone:(0845) 130-2511
TEAC EUROPE GmbH	Bahnstrasse 12, 65205 Wiesbaden-Erbenheim, Germany Phone: 0611-71580
TEAC ITALIANA S.p.A.	Via C, Cantu 9/A, 20092 Cinisello Balsamo, Milano, Italy Phone:02-66010550
TEAC AUSTRALIA PTY., LTD. A.B.N. 80 005 408 462	280 William Street, Melbourne VIC 3000, Australia Phone:(03)9672-2400

OCT 2005

PREPARED IN HONG KONG

MAIN(TUNER) PCB - 1



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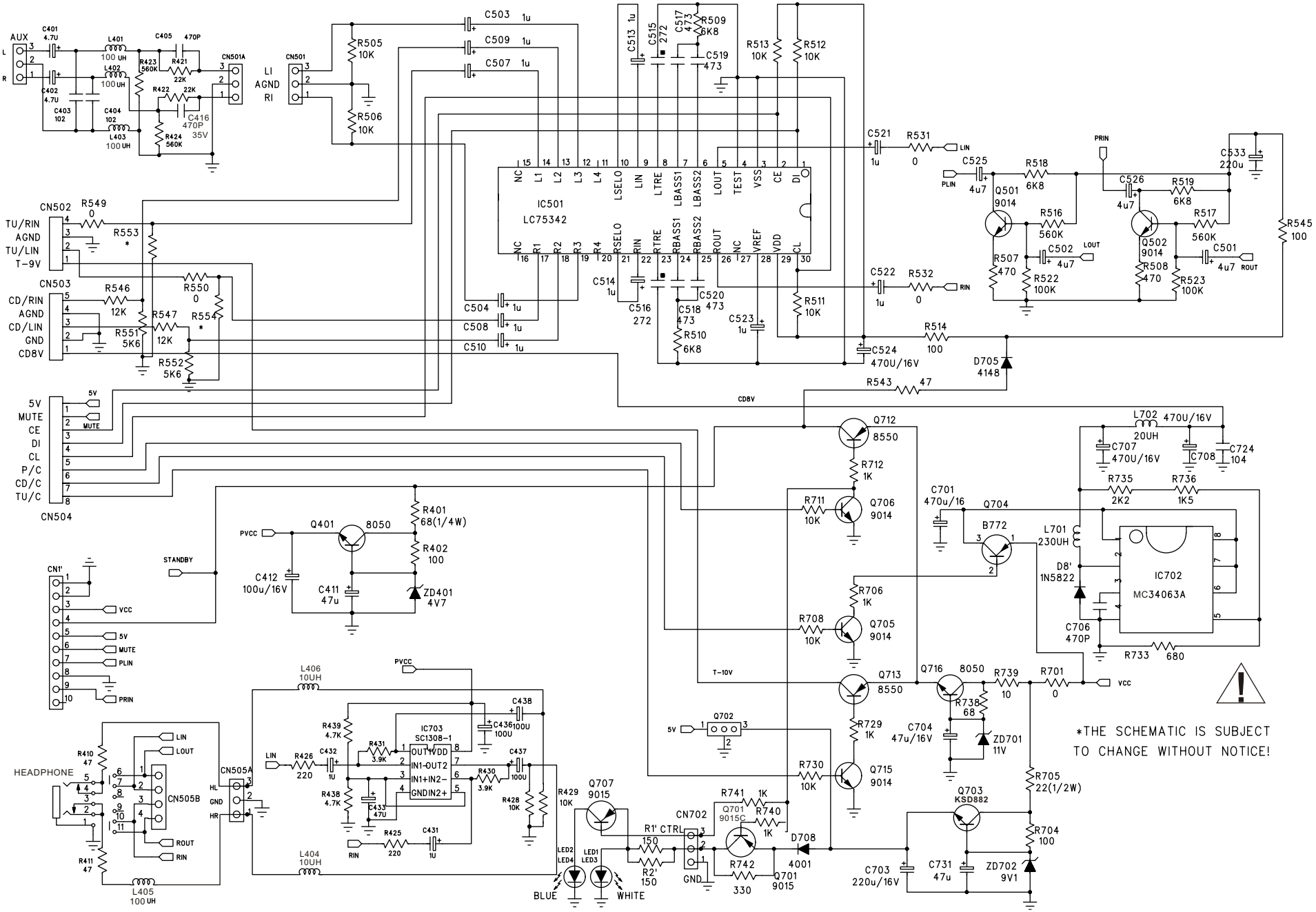
MICRO HI-FI SYSTEM

MAIN(TUNER) PCB - 2



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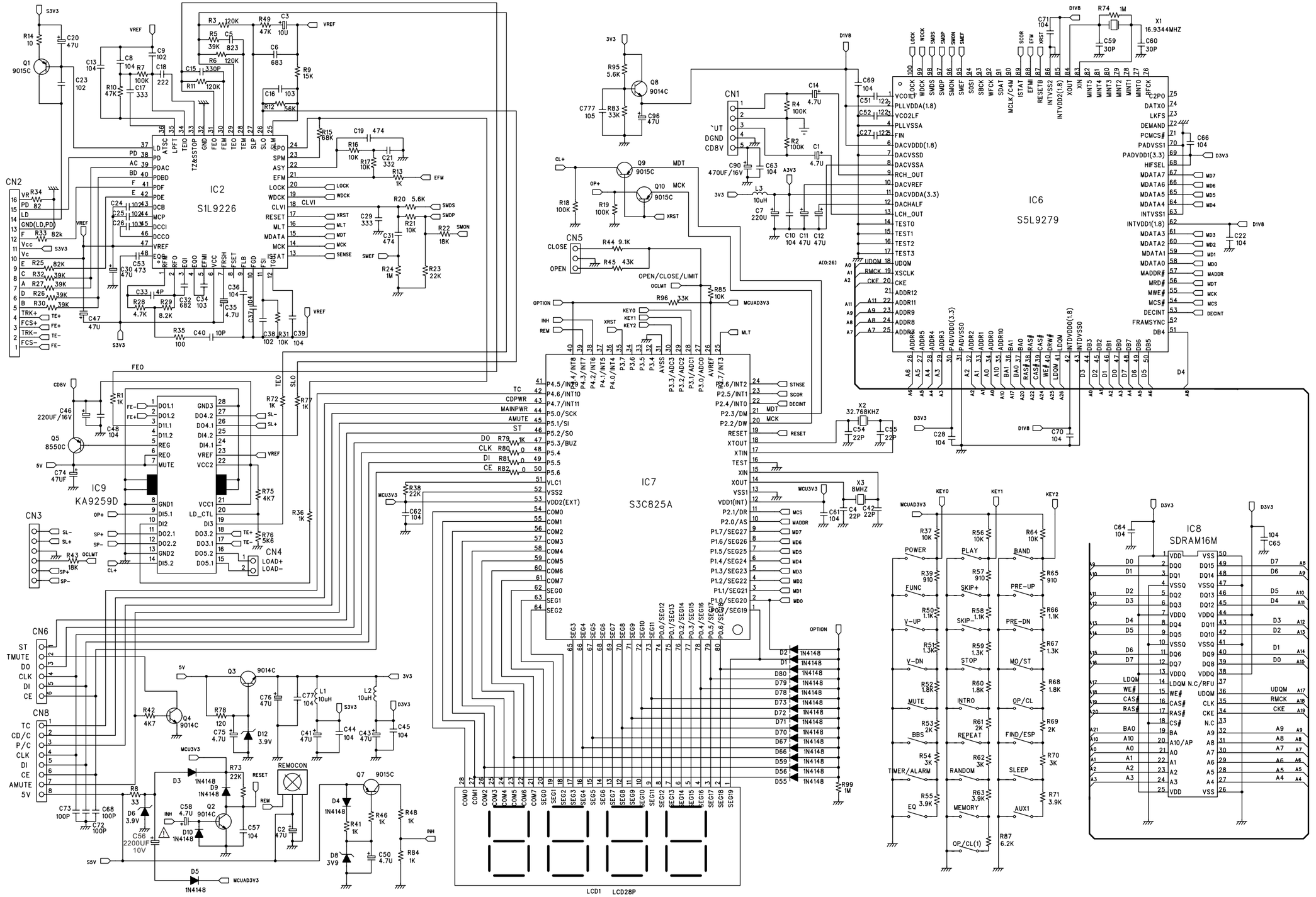
MICRO HI-FI SYSTEM



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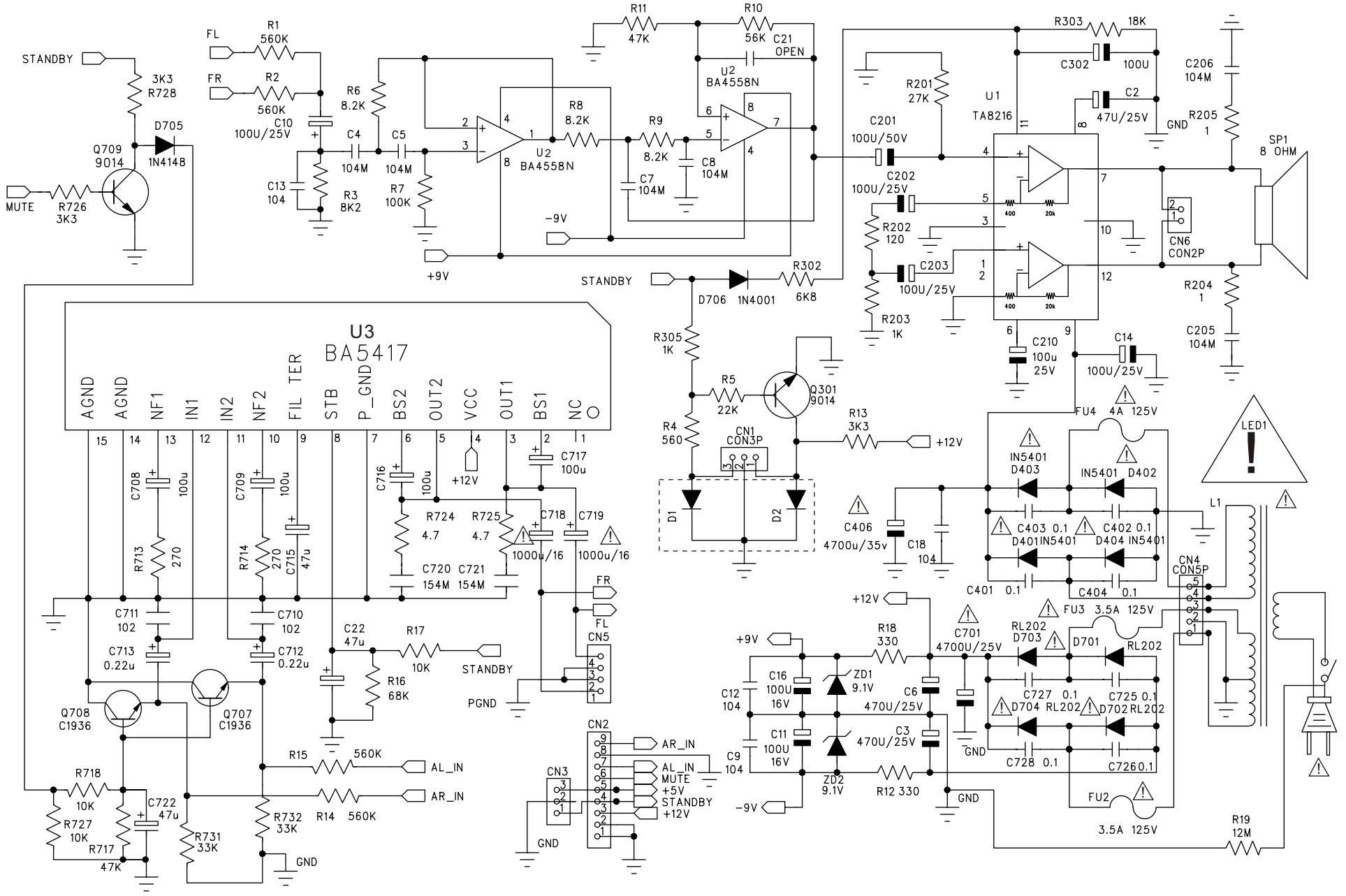
MICRO HI-FI SYSTEM

SUBWOOFER POWER PCB



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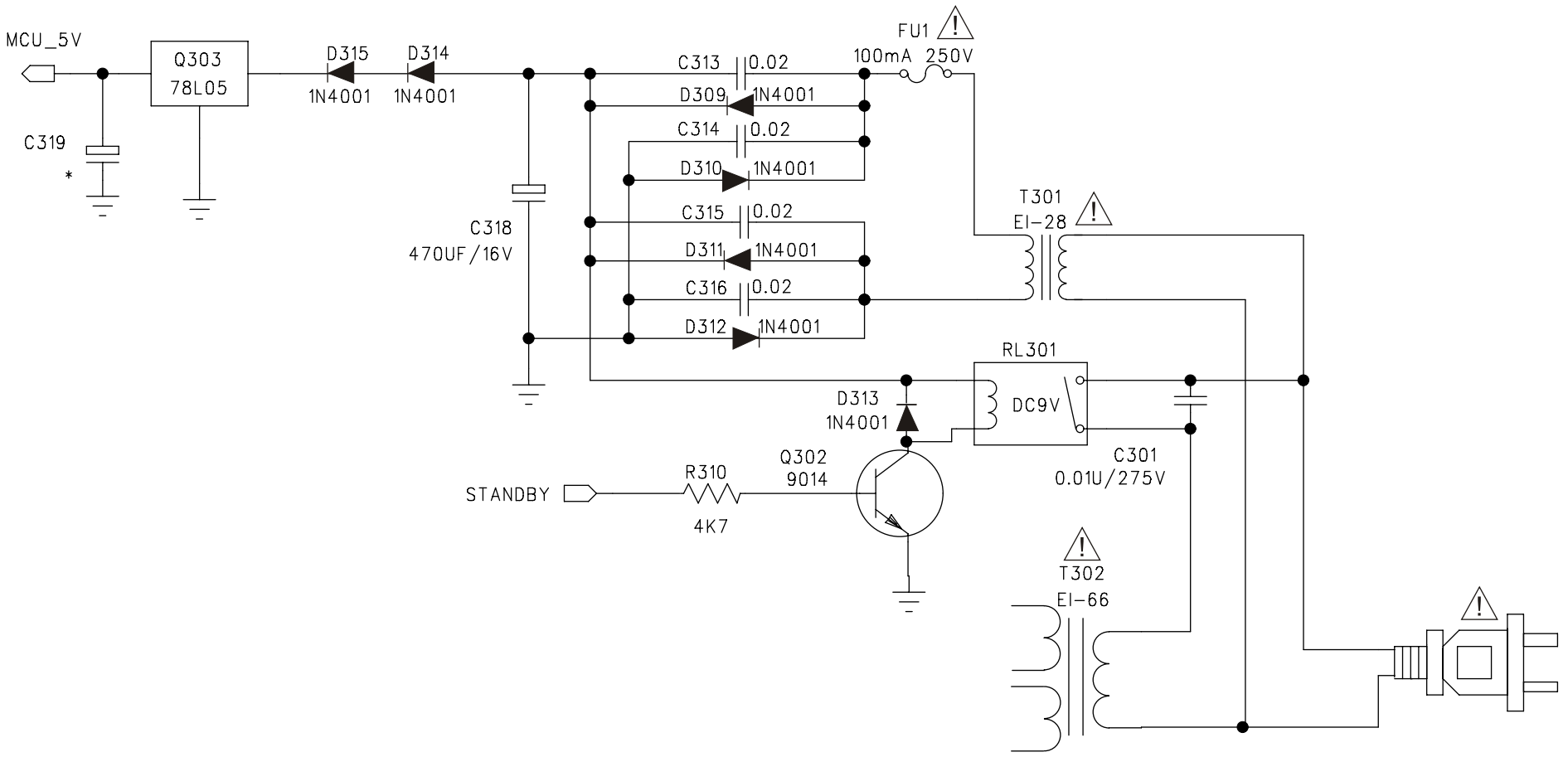
MICRO HI-FI SYSTEM

LOW POWER STANDBY PCB



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MICRO HI-FI SYSTEM